REMARKS

Claims 1, 3, 5 and 6 are pending in this application. By this Amendment, claim 1 is amended to incorporate the subject matter recited in claim 4. Accordingly, claim 4 is canceled. The title is amended.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments:

(a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration as the amendments simply incorporate the subject matter of a former dependent claim, and amend the title as required by the Office Action; and (c) place the application in better form for appeal, should an appeal be necessary. Entry of the amendments is thus respectfully requested.

The Office Action objects to the title. The title is amended, as the Examiner requested. Accordingly, withdrawal of the objection to the title is respectfully requested.

The Office Action objects to the specification. The Office Action asserts that the specification does not describe an optical fiber that is heat-resistant and that extends through a collet. This objection is respectfully traversed, for the following reasons.

First, the application discloses an optical fiber probe having high heat resistance. See page 1, line 9. Additionally, the specification discloses that the optical fiber 1 is heat-resistant. See page 4, lines 12-14. Thus, the specification discloses a heat-resistant optical fiber.

Second, the specification discloses a collet 3 having a flange 3a, and that the optical fiber 1 extends through the collet 3. See Fig. 2. Additionally, the specification discloses that the optical fiber is movable relative to the collet and is able to extend relative to the collet. See page 3, lines 20-23; page 6, lines 23-27; and the originally filed claim 2. Thus, the specification does describe that the optical fiber extends through the collet.

For at least the above reasons, withdrawal of the objection to the specification is respectfully requested.

The Office Action rejects claim 5 under 35 U.S.C. §112, first paragraph. This rejection is respectfully traversed.

The Office Action asserts that the specification does not describe that the optical fiber is heat-resistant. However, as discussed above, the specification discloses that the optical fiber is heat-resistant at, for example, page 1, line 9; and page 4, lines 12-14. Accordingly, withdrawal of the rejection of claim 5 under 35 U.S.C. §112, first paragraph, is respectfully requested.

The Office Action rejects claims 1 and 3-5 under 35 U.S.C. §102(b) over U.S. Patent Publication No. 2002/0138073 to Intintoli et al. ("Intintoli"). This rejection is respectfully traversed.

The Office Action asserts that Intintoli discloses all elements recited in claims 1 and 3-5. However, Intintoli does not disclose or suggest an optical fiber that is movable relative to a collet during diagnosis of a combustion condition, as recited in claim 1.

Intintoli discloses a probe having an optical fiber 12 and an end plug 34. See Fig. 1 and paragraphs 0043 and 0044. The optical fiber 12 is bonded by adhesive to a tube 22 on which the plug 34 is mounted. See Fig. 1 and paragraph 0043. Thus, the optical fiber 12 is not movable relative to the plug 34.

The Office Action asserts, in the "Response to Argument" section, that Intintoli shows that the optical fiber is movable relative to the collet. However, the Office Action does not cite any portion of Intintoli that describes such a relative movement. In fact, as discussed above, Intintoli discloses that the optical fiber 12 is bonded to the tube 22 on which the plug 34 is mounted. Therefore, Intintoli discloses that the optical fiber is not movable relative to the plug 34.

The Office Action further asserts, in the "Response to Argument" section, that there is nothing in Intintoli to prevent such a movement. This assertion is both incorrect and irrelevant. First, this assertion is incorrect because, as discussed above, Intintoli's optical fiber 12 is bonded to the tube 22 on which the plug 34 is mounted. Therefore, the optical fiber is prevented from moving relative to the plug. Second, this assertion is irrelevant because, in a rejection under 35 U.S.C. §102(b), the criterion is not whether there is anything in Intintoli to prevent such a movement. Rather, the criterion is whether Intintoli discloses such a movement. Thus, the assertion that there is nothing in Intintoli to prevent such a movement is irrelevant in a rejection under 35 U.S.C. §102(b). See MPEP §2112 for a discussion of the Examiner's burden regarding inherency, in which it is stated that the possibility, even the probability of the existence of a feature is not sufficient to sustain a rejection. The Examiner must provide some proof or technical reasoning to show that the alleged feature must be present.

Furthermore, as discussed in Applicants' previous response, the probe disclosed in Intintoli is a surgical probe. See paragraph 0001. As is known, a surgical probe is not expected to be used for diagnosing a combustion condition in a combustor. Thus, under no circumstance would Intintoli disclose or suggest that the optical fiber is movable relative to the plug during diagnosis of a combustion condition, as required in claim 1. The Office Action ignores this point, asserting that "combustion condition in a combustor" is not positively claimed. This is incorrect and improper. First, it is not proper to require the Applicants to claim the combustor itself. Second, the claims do positively recite the diagnosis of a combustion condition.

For even further distinction, claim 1 has been amended to include the features of former claim 4. The Office Action fails to explain where these features are believed to be present in the Intintoli device. In fact, these features are clearly <u>not</u> present in Intintoli,

because Intintoli needs no cooling, and therefore there is no need for or benefit from the pipe length recited in claim 1 (formerly claim 4).

In view of the above, withdrawal of the rejection of claims 1 and 3-5 under 35 U.S.C. §102(b) is respectfully requested.

The Office Action rejects claim 6 under 35 U.S.C. §103(a) over Intintoli in view of U.S. Patent 5,943,460 to Mead et al. ("Mead"). This rejection is respectfully traversed.

Mead discloses a fiber optic connector having a collet 17. See Fig. 1 and col. 4, lines 56-66. Mead does not disclose or suggest an optical fiber that is movable relative to a collet during diagnosis of a combustion condition, as recited in claim 1. Therefore, Mead does not supply the subject matter lacking in Intintoli.

For at least the above reason, Intintoli and Mead do not disclose or suggest the subject matter recited in claim 1, and claim 6 depending therefrom. Accordingly, withdrawal of the rejection of claim 6 under 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3, 5 and 6 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

James A. Oliff

Registration No. 27,075

Gang Luo

Registration No. 50,559

JAO:GXL/djb

Date: July 27, 2005

OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, Virginia 22320 Telephone: (703) 836-6400 DEPOSIT ACCOUNT USE
AUTHORIZATION
Please grant any extension
necessary for entry;
Charge any fee due to our
Deposit Account No. 15-0461